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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/969,044	12/15/2010	Chitra Dorai	YOR920100433US1	3490

35526 7590 03/31/2017

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ART UNIT	PAPER NUMBER
3693	

NOTIFICATION DATE	DELIVERY MODE
03/31/2017	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte Chitra Dorai, Eric R. Ray, Gary L. Seybold, and Anshul Sheopuri

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Appeal 2015-003585
Application 12/969,044
Technology Center 3600

Before MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and KENNETH G. SCHOPFER, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–25. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

Appellants' invention is directed to determining the probability of an action being performed by a party at imminent risk of performing the action (Spec. 1)

Claim 1 is illustrative:

1. A method for determining a remedial strategy associated with a particular action, comprising:

receiving input information by a data processing system, comprising information identifying one or more factors associated with the particular action that is at risk of being performed and the party at risk for determining whether the party is at risk of performing the particular action;

forming, by the data processing system, an incentive structure comprising an incentive curve having a first slope and a first axis intercept and a disincentive curve having a second slope and a second axis intercept for the party based on the received input information, identifying a probability of the party performing the particular action;

determining, by the data processing system, an optimal probability *P** of the party performing the particular action based on the incentive structure and a party decision model using one of a heuristic search, when an expected utility is a non-convex function, or an efficient search technique when the expected utility is a convex function;

computing, for the particular action, a preferred probability *p_d* of an entity of interest for the party;

determining whether, for the particular action, the optimal probability *P** is greater than the preferred probability *p_d;* and

responsive to a determination the optimal probability *P** is greater than the preferred
probability *p_d* offering an optimal remedial strategy, wherein the optimal remedial strategy is one of do nothing, or take a selected remedial action, to reduce the optimal probability *P** of the party performing the particular action;

responsive to offering the optimal remedial strategy, using an entity of interest model,
selecting a type of incentive, by the entity of interest model, to reduce the optimal probability of the party performing the particular action; and

updating at least one of the party decision model and the entity of interest model using information obtained during the determining of the optimal probability of the party performing the particular action and identifying the optimal remedial strategy.

Appellants appeal the following rejection:

Claims 1–25 are rejected under 35 U.S.C. 101 because the claimed invention is not directed to patent eligible subject matter.

ISSUE

Did the Examiner err in rejecting the claims under 35 U.S.C. § 101 because the claims relate to a special purpose computer?

ANALYSIS

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "laws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

In judging whether claim 1 falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the

claim is "directed to" a patent-ineligible abstract idea. If so, we then consider the elements of the claim both individually and as "an ordered combination" to determine assess whether the additional elements "transform the nature of the claim" into a patent-eligible application of the abstract idea. *Id.* This is a search for an "inventive concept" an element or combination of elements sufficient to ensure that the claim amounts to "significantly more" than the abstract idea itself. *Id.* The Court also stated that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 2358.

Here, the Examiner found that the claim is directed to determining the probability of an action being performed by a party at risk of performing an action which is a fundamental economic practice and thus an abstract idea (Fin. Act. 2). We agree. Appellants' specification teaches on page 1, that in the financial services field, the traditional focus of mortgage servicers, for example, is to identify loans that are at risk of default using various analytical models for predicting the likelihood of borrowers to default on their loans. Even Appellants' own specification teaches that determining whether an action (default) will be performed by a party at risk (borrower) is a traditional focus and thus a fundamental economic practice.

In regard to the Appellants' argument that the claims are not directed to determining probability of an action being performed by a party at risk of performing an action but rather toward a remedial strategy associated with a particular action, we hold that that too is a fundamental economic practice, i.e. determining what to do if a party defaults on a loan. We note that page 2 of Appellants' disclosure discusses the remedial strategies used currently when a party defaults, such as modifying an existing loan.

Appellants also argue that the creation of data structures in the memory of the system of the invention changes the physical characteristics of the memory in the system to therefore transform a generic computer to a particular or special purpose computer (Appeal Br. 12). According to the Appellants, this improved data processing system enables data processing to determine probability of the party performing the particular action based on the incentive structure.

This arguments relates to the second step in the determination of whether the claims recite patent eligible matter, i.e. whether additional elements transform the nature of the claim into a patent-eligible application of the abstract idea, e.g., whether the claim does more than simply instruct the practitioner to implement the abstract idea over the using generic computer components.

The Appellants rely on *In re Alappat,* 33 F.3d 1526, 1545 (Fed. Cir. 1994) (en banc) to support their contention that the embodiments of the invention create a special purpose computer once the generic computer is programed to perform the particular functions as claimed (Reply Br. 4). It may be true that a special purpose computer is formed once programmed in some cases, but not here. In this case, it is clear that the Appellants' invention serves only to more quickly calculate the optimal probability. "[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible." *OIP Techs., Inc. v. Amazon.com, Inc.,* 788 F.3d 1359, 1363 (Fed. Cir. 2015), *cert, denied,* 136 S. Ct. 701 (2015) (citing *Alice,* 134 S. Ct. at 2359 ("use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions" is not an inventive concept)).

In addition, we agree with the Examiner that Appellants' own disclosure at page 12 states that the invention can take the form entirely of hardware, or entirely of software or software and hardware combined thereby indicating that no specific structure is used to implement the various functions. Further, Appellants' disclosure at page 6 states that any general purpose computer can be used in the invention.

In view of the foregoing, we affirm the Examiner's rejection.

DECISION

The decision of the Examiner is affirmed.

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1) (2009).

ORDER

AFFIRMED